# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

#### ORDER NO. 79-130

WATER RECLAMATION REQUIREMENTS FOR:

CITY OF ST. HELENA NAPA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter Board) finds that:

- 1. City of St. Helena (hereinafter discharger) has submitted a report of waste discharge dated August 20, 1979, and applied for wastewater reclamation requirements.
- 2. The discharger proposes use of effluent from the discharger's oxidation pends to irrigate approximately 215 acres of land to grow hay or fodder crops.
- 3. The discharger plans to purchase the needed land from the Mardikian and Carpy families.
- 4. The discharger will prepare maps showing the exact areas and fields to be irrigated and the domestic and irrigation wells in the vicinity.
- 5. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving the recommendations of the State Department of Public Health, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. The use of reclaimed water for the purposes specified could affect the public health, safety, or welfare, and requirements for these uses are therefore necessary in accordance with the Water Code.
- 6. The Board adopted a Water Quality Control Plan for San Francisco Bay Basin in April 1975. The water quality objectives for reclaimed wastewater, as set forth in the Basin Plan, specify those limits prescribed in Title 17, Section 8025 through 8050, California Administrative Code. These objectives have been superseded by Title 22, Section 60301 60357, California Administrative Code.
- 7. The discharger adopted an Environmental Impact Report on August 23, 1979, in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq). Proper irrigation management and compliance with the requirements of this order are expected to mitigate any specific adverse impact.
- 8. The Board has notified the discharger and interested agencies and persons of its intent to prescribe water reclamation requirements for the proposed uses.

9. This Board at a public meeting heard and considered all comments pertaining to this reuse.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, that the discharger shall comply with the following:

# A. Prohibitions

- 1. The average dry weather waste flow to the oxidation ponds shall not exceed 0.5 mgd. Average shall be determined over three consecutive months each year.
- 2. The collection, treatment, distribution, reuse or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
- 3. There shall be no bypass, overflow or discharge of waste to waters of the State either at the treatment plant or from the collection system.
- 4. Unless written authorization permitting reclamation of wastewater on a specific field or defined area is received from this Board's Executive Officer, the discharger shall not permit such a discharge of wastewater.
- 5. Wastewater shall not impair ground water quality.

# B. Discharge Specifications

- 1. Wastewater within one foot of the surface of the ponds shall meet the following limits at all times:
  - a. Dissolved oxygen 2.0 mg/l minimum
  - b. Dissolved Sulfide 0.1 mg/l maximum
  - c. pH 6.0 minimum 9.0 maximum
- 2. A minimum freeboard of at least 2 foot shall be maintained in the ponds.
- 3. The ponds shall be protected against erosion, washout and flooding from a flood having a predicted frequency of once in 100 years.
- 4. At some point in the treatment process the wastewater shall meet the following limits at all times:
  - a. BOD 40 mg/l maximum 30 day average
  - b. The total coliform bacteria for a median of five consecutive effluent samples shall not exceed 240 per 100 milliliters.

    Any single sample shall not exceed a most probable number (MPN) of 10,000 total coliform bacteria per 100 milliliters when verified by a repeat sample taken within 48 hours.

# C. Reclaimed Wastewater Use Limitations

- 1. Use of reclaimed wastewater shall be limited to irrigation of fodder, fiber and seed crops or a less restrictive use approved by the Executive Officer.
- 2. Use of reclaimed wastewater shall be limited to the areas specified in Finding 3 of this Order unless written authorization is obtained from the Executive Officer.
- 3. Reclaimed wastewater shall be applied to use areas in a manner which will prevent public contact with the wastewater.
- 4. Areas irrigated with reclaimed wastewater shall be clearly identified with posted notices to the public. The method and form of notification shall be subject to the review and approval of the Executive Officer.
- 5. All equipment, including pumps, piping, valves, etc., which may at any time contain waste shall be adequately and clearly identified with warning signs, and the discharger shall make all necessary provisions, in addition, to inform the public that the liquid contained is sewage and is unfit for human consumption.
- 6. No reclaimed wastewater used for irrigation shall be allowed to escape to any area outside the disposal areas, either by surface flow or airborne spray.
- 7. Wastewater irrigation ponding which could provide a breeding area for mosquitoes shall be prevented.
- 8. If a quality or use requirement should be violated, the irrigation with reclaimed wastewater shall be, immediately, terminated and not resumed until the discharger has corrected all violations and conditions which would permit the violations to recur.

# D. Provisions

1. The discharger shall comply with the following time schedule to assure compliance with Prohibitions A.3 and A.4; Discharge Specification B.4.b; and Reclaimed Water Use Limitations C.1, C.2, C.3, C.4, C.5, C.6, C.7, and C.8.

# Task Completion Date

- a. Submit maps showing exact areas and fields to be irrigated
- January 1, 1980
- b. Submit maps showing locations of domestic and irrigation wells in, or adjacent to, the irrigation areas

January 1, 1980

### Task

# Completion Date

c. Submit a report that is satisfactory to the Executive Officer after consultation with the Health Department, on how each well will be adequately protected and describe, in detail, the safeguards to prevent backflow of reclaimed wastewater into the well casing and seepage down the outside of the casing.

March 1, 1980

d. Begin Design

November 1, 1979

e. Submit Plans and Specifications

June 1, 1980

f. Award contract

September 2, 1980

g. Complete Construction

September 1, 1981

h. Full Compliance

October 1, 1981

- 2. This Order includes the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977.
- 3. The discharger shall comply with a Self-Monitoring Program as ordered by the Executive Officer.
- 4. The discharger shall maintain in good working order and operate, as efficiently as possible, any facility or control system installed to achieve compliance with the water reclamation requirements.
- 5. The discharger shall file with this Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, treatment, or volume of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, or ownership of the property.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on October 16, 1979.

FRED H. DIERKER Executive Officer

# Attachments:

Standard Provisions, Reporting Requirements and Definitions - April 1977